

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (original) A device that determines condensation conditions and suppresses condensation having a given physical state from a surface, comprising:

- a first thermal sensor in thermally conductive contact with the surface;
- a second thermal sensor in an environment separated from the surface;
- a humidity sensor in the environment of the second thermal sensor;
- a condensation suppression mechanism configured to suppress condensation having the given physical state from the surface; and
- a circuit configured to cause the condensation suppression mechanism to be activated when a temperature sensed by the first thermal sensor, a temperature sensed by the second thermal sensor, and a humidity sensed by the humidity sensor indicate that a condensation condition requires suppression at the surface.

2-7. (canceled)

8. (original) The device of claim 1 wherein the condensation condition is a presence of condensation on the surface, and the condensation suppression mechanism is a condensation removal mechanism configured to remove condensation having the given physical state from the surface the device.

9. (canceled)

10. (original) The device of claim 1 wherein the given physical state is a liquid state.

11. (original) The device of claim 1 wherein the surface is a windscreen.

12. (original) The device of claim 11 wherein the surface is a windscreen of a vehicle.
13. (original) The device of claim 1 wherein the surface is a helmet visor.
14. (original) The device of claim 1 wherein the surface is a computer monitor screen.
15. (original) The device of claim 1 wherein the surface is a window.
16. (original) The device of claim 1 wherein the surface is an enclosure for electronic equipment.
- 17-24. (canceled)
25. (original) The device of claim 1 wherein the first and second thermal sensors are thermocouples.
26. (canceled)
27. (original) The device of claim 1 wherein the first thermal sensor is in actual physical contact with the surface.
28. (original) The device of claim 1 wherein the first thermal sensor is affixed to the surface.
29. (original) The device of claim 1 wherein the first thermal sensor is embedded within the surface.
30. (original) The device of claim 1 wherein the humidity sensor is a capacitive sensor.

31. (original) The device of claim 1 wherein the condensation suppression mechanism comprises a fan.

32. (original) The device of claim 1 wherein the condensation suppression mechanism comprises a heating mechanism.

33. (original) The device of claim 1 wherein the condensation suppression mechanism comprises a mechanism configured to divert an airstream through a duct having a heating mechanism contained therein.

34. (original) The device of claim 1 wherein the condensation suppression mechanism comprises an infrared source.

35. (canceled)

36. (original) The device of claim 1 wherein the circuit configured to cause the condensation suppression mechanism to be activated is configured to directly activate the condensation suppression mechanism.

37. (original) A method of determining condensation conditions and suppressing condensation having a given physical state from a surface having a first thermal sensor in thermally conductive contact therewith, comprising:

sensing a temperature using the first thermal sensor;

sensing a temperature using a second thermal sensor in an environment separated from the surface;

sensing humidity using a humidity sensor in the environment of the second thermal sensor;

causing a condensation suppression mechanism to be activated in order to suppress condensation having the given physical state from the surface when the temperature sensed by the first thermal sensor, the temperature sensed by the second thermal sensor, and the humidity

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sensed by the humidity sensor indicate that a condensation condition requires suppression at the surface.

38-53. (canceled)